

Reflections on how the roads group and its boards have grown

Bridges Board chair Dana Skelley is stepping away from the UKRLG. Here she offers her thoughts on how the group has fared over the last 16 years.

Set up in 2001, the UKRLG was the idea of the now retired Ian Holmes who headed up roads policy for the Department for Transport. The dedicated partnership of Ian Holmes and Edward Bunting of the DfT helped to bring together all highway related bodies across the UK and fostered an evidence based approach to changing the industry for the better.

Across the UK the sharing of practices (both best and not so good) combined with informed debate has meant that clients were in a position to influence change and introduce new approaches to infrastructure maintenance codes and legislation.

UKRLG originally covered just the Roads, Bridges and Lighting boards. They were joined by the Network Management Board in 2002, which has been led by influential characters such as Derek Turner and Martin Low.

Each board is comprised of public sector practitioners from across the nation, all bringing their own passion, character and insight. It is the bringing together of different geographies and people in different organisational roles at different levels that enables collaborative problem solving and even mutual aid.

I have chaired both the Lighting and Bridges boards in my time with UKRLG and have to say it has been a largely male dominated experience with one or two notable exceptions. It was when the UKRLG was chaired by Charlotte Dixon of the DfT that the Wiggington Review was commissioned into the effectiveness of the UKRLG and its Boards and improvements in governance and membership were made.

I personally have to take some responsibility for persuading the UKRLG to insist that the Codes pursue a risk

based approach to maintenance – moving engineers out of their comfort zones of minimum standards and into a place where we really do have to think about what is right for our customers, given the austerity we face.

Two women are currently chair and vice chair of the Bridges Board (myself and Liz Kirkham of Gloucester County Council) and we have been tireless in our push to solve Network Rail / highway authority / Highways England conundrums around boundaries, standards and possessions – all with a desired outcome to get the fairest deal for our customers, the users of the infrastructure.

Many will recall the 2009/10 severe winter in terms of the availability of salt for gritting; it was the first severe winter after a spell of mild winters and meant many authorities were caught off guard with salt supplies, gritters and procedures. Being part of the national 'salt cell' and the subsequent reviews which have brought huge collaboration and mutual support were a big learning experience for me.

The politics and range of attitudes in terms of parochial versus wider outcome was fascinating and it took the patience and insightful intellect of David Quarumby to set us on the road to success with the winter service reviews.

In terms of legacy, I've long held the view that the UKRLG having separate asset focused boards rather than a pan-asset management approach holds us back from tackling some of the more strategic issues in our business planning: climate change, investment prioritisation and resilience. I am pleased that the UKRLG will be pursuing an Asset Management Board – that spans across different asset classes rather than focusing just on roads – without



↑ Dana Skelley

completely reinventing its operations, so watch this space.

Finally I would urge the UKRLG and its boards to be forward looking and concentrate on 'horizon scanning'. Think about what needs to be tackled today and into the future rather than review something when it might not have gone quite according to plan.

We have done this with BIM guidance where we used a Transport for London base document, widened it and enhanced it to be nationally applicable. And we must do this with our consideration not only of digital technology, but of robotics and drone use for example.

At my very last Bridges Board meeting West Sussex County Council's Kieran Dodds shared his experience of trialling drone use for bridge inspections (see next page). What a great opportunity for the industry to share experiences and shape the future in terms of safer access and better maintainability from a perspective of shared knowledge.

UK ROADS LIAISON GROUP

c/o CIHT, 119 Britannia Walk
London N1 7JE

email: info@ciht.org.uk

tel: 0207 336 1555

web: ukroadsliaisongroup.org

twitter: [@ukrlg](https://twitter.com/ukrlg)

UKRLG Chairman:
Graham Pendlebury

UKRLG Board Chairmen

Roads: James Bailey

Lighting: Lindsay McGregor

Bridges: Dana Skelley

Network Management: Mark Kemp

Senior Policy Officer

Justin Ward

email: justin.ward@ciht.org.uk

tel: 0207 336 1584

Merits and challenges of using inspection drones explored



↑ Bridge inspectors fly a drone beneath two very different structures in order to capture condition data and take photographs up close



BALFOURBEATTY

Use of drones for bridge inspections is currently being trialed by West Sussex County Council and Balfour Beatty.

Drones – also known as unmanned aerial vehicles – are often heralded as a truly disruptive technology capable of giving engineers eyes in the hardest to reach places, without getting in the way of the travelling public or putting inspectors in potentially dangerous situations.

But are they practical to use and do they deliver what they promise? Justin Ward (JW) spoke to the council's infrastructure manager Kieran Dodds (KD) – pictured below.

JW: Can you give us an overview of the trial of using drones for bridge inspections?



KD: What we are trying to determine is whether drones have a place in the bridge inspector's arsenal.

There are lots of potential merits and benefits but we need to determine what it works

for, where it works and what the parameters are for using it.

JW: Which other authorities are using drones?

KD: One is Minnesota's department of transportation in America. It's quite encouraging that in the work we are undertaking we are finding very similar outputs.

JW: What are these outputs?

KD: You get a high quality image. Large data files can be interrogated and you can look at the data that has been captured to establish whether you can then actually identify the current condition of the asset. Usually this involves images from hard to reach places – this is one of the primary benefits from using drones.

JW: What kind of bridge inspection techniques would traditionally have been used?

KD: We have several types of bridge inspection. There is a general inspection that is visual, then we have a principal inspection which takes in all elements within touching distance. For a general inspection an inspector might stand on a river bank, for instance, observe (possibly with a pair of binoculars) and identify defects that can be seen.

JW: How are you using the drone?

KD: The first round of the trial was to understand the quality of the output we can get from the quadcopter with 4k video. We can access 12MP images, gathered either from the drone when it is flying or from a video afterwards for use in reports.

JW: Can the drones be affected by strong wind?

KD: On first day of the trial it was quite blustery. But although the drone received a bit of buffeting, the image quality was very stable.

JW: What happens after the trial?

KD: There is a second phase to the trial to identify structures where we really believe the use of drones will have merit. Ultimately we will know which structures are appropriate for drone use.

JW: Where do you see drones being particularly useful?

KD: On the more hard to reach and difficult to access structures such as those over tidal or fast flowing water. Also on high structures, old railways and remote public rights of way. You also get the benefits not only of a close up inspection but you can also move the drone away from the structure and get a wider shot.

So you might be able to predict scour developing on a structure upstream once the profile of the river changes. Abutments and foundations might be at risk of scour and the drone will provide early warning to that sort of issue.

This is an edited script of a full interview due to follow as a CIHT podcast in July.

SCANNER research reports published

Research reports about the development of SCANNER are now available on the UKRLG website, following publication of the update piece in the May edition of *TP*.

SCANNER surveys were introduced in 2009 to provide network wide condition assessment of the local A, B and minor road networks using survey vehicles that travel at traffic speed. Laser sensors measure the shape of the road surface and digital cameras capture images of the surface.

In 2014 there were three key areas where enhancements or modifications to SCANNER were required based on views from local authorities, software developers, survey

contractors and the SCANNER auditor. These were for consistency, SCANNER condition parameters, and on the appropriateness of the SCANNER road condition index.

The Scottish Road Research Board, in collaboration with the UK Roads Board, commissioned work to investigate and develop SCANNER surveys in the three key areas identified, separated into three tasks.

Results of the work are now available as TRL published project reports PPR816 and PPR817, for Tasks 1&2 (Consistency, SCANNER Condition Parameters) and Task 3 (Appropriateness of the SCANNER RCI) respectively. An Executive Summary is also available.